U.S. Patent Application Serial No. **09/822,230** Amendment filed December 21, 2004 Reply to OA dated September 21, 2004

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

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Claim 1 (currently amended): A device for gasifying a sterilizing liquid comprising a hot air duct having an inlet at one end thereof and an outlet at the other end thereof, a hot air source for supplying to the inlet hot air having a temperature capable of gasifying the sterilizing liquid, means for spraying the sterilizing liquid into the hot air duct, and a heat generator disposed opposite as opposed to the outlet, wherein at least the outlet of the hot air duct and the heat generator are surrounded by a closed gasifying tank, and the gasifying tank has a gas discharge opening on one side of the outlet in the tank opposite to the heat generator on the other side of the outlet.

Claim 2 (currently amended): A device for gasifying a sterilizing liquid comprising a hot air duct having an inlet at one end thereof and an outlet at the other end thereof, a hot air source for supplying to the inlet hot air having a temperature capable of gasifying the sterilizing liquid, means for spraying the sterilizing liquid into the hot air duct, and a heat generator disposed opposite to the outlet, wherein

the hot air duct includes an inner duct portion extending through a wall of the tank and having an open end providing the outlet, the tank has an outer duct portion surrounding at least a portion of the inner duct portion and being spaced apart from the inner duct portion to form a double

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supplies the hot air directly to the inner duct portion through the inlet, and the outer duct portion provides a gas discharge opening A sterilizing liquid gasifying device according to claim 1 wherein at least the outlet of the hot air duct and the heat generator are surrounded by a closed gasifying tank, and the gasifying tank has a gas discharge opening on one side of the outlet in the tank opposite to the heat generator on the other side of the outlet.

Claim 3 (currently amended): A device for gasifying a sterilizing liquid comprising a hot air duct having an inlet at one end thereof and an outlet at the other end thereof, a hot air source for supplying to the inlet hot air having a temperature capable of gasifying the sterilizing liquid, means for spraying the sterilizing liquid into the hot air duct, and a heat generator disposed opposite to the outlet, wherein

at least the outlet of the hot air duct and the heat generator are surrounded by a closed gasifying tank, and the gasifying tank has a gas discharge opening on one side of the outlet in the tank opposite to the heat generator on the other side of the outlet, and A sterilizing liquid gasifying device according to claim 2 wherein

the hot air duct has a vertical inner duct portion extending through a top wall of the gasifying tank into the tank and having an open lower end providing the outlet, and the gasifying tank has a vertical outer duct portion surrounding the inner duct portion to form a double duct structure along with the inner duct portion and having an open upper end providing the discharge opening, the ratio

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of the cross sectional area of the inner duct portion to the cross sectional area of a portion between
the inner duct portion and the outer duct portion being 1 to 2.

Claim 4 (original): A sterilizing liquid gasifying device according to claim 3 wherein the heat generator is a plate heater disposed on a bottom wall of the gasifying tank so as to be orthogonal to the inner duct portion.

Claim 5 (original): A sterilizing liquid gasifying device according to any one of claims 1 to 4 wherein the hot air has a temperature of at least 300 C.

Claim 6 (original): A sterilizing liquid gasifying device according to any one of claims 1 to 4 wherein the spraying means has a spray nozzle with an orifice positioned within the hot air duct, and the orifice has a diameter of 0.5 mm to 3 mm.

Claim 7 (original): A sterilizing liquid gasifying device according to claim 6 wherein the spray nozzle is of the two fluid type, and the hot air is supplied at not lower than five times the rate of supply of air to the spray nozzle.

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